



## ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

### SIGNIFICANT PERMIT REVISION DESCRIPTION

This Class I significant permit revision is for El Paso Natural Gas Company (EPNG), the Permittee, for operation of its Williams Compressor Station near Williams, Coconino County, Arizona.

This facility is a natural gas compressor station. The Permittee operates several internal combustion engines at this facility. The facility has a total potential to emit for Hazardous Air Pollutants (HAPs) of 58.05 tons per year. The primary HAP emissions are Formaldehyde (26.6 tpy) and Acetaldehyde (22.4 tpy). One of the internal combustion engines, the Ingersoll-Rand unit, is subject to the Reciprocating Internal Combustion Engine (RICE) Maximum Available Control Technology (MACT) requirements because it is a four stroke rich burn engine as defined in 40 CFR §63.6675. This permit revision will incorporate the RICE MACT requirements for the Ingersoll-Rand engine into the permit, as well as correcting an incorrect equation for the GE Gas Turbine Engine.

**Addenda (Significant Revision) #40117  
to Operating Permit #28162  
for  
El Paso Natural Gas Company**

*Condition II.D.1 of Attachment "B" of Operating Permit No. 28162 shall be amended to read as follows:*

#### **II. RECIPROCATING ENGINES**

##### **D. Nitrogen Oxides and Carbon Monoxide**

1. A performance test for NO<sub>x</sub> and CO shall be conducted on the reciprocating engines once per permit term, except for the Ingersoll-Rand emergency generator.

[A.A.C. R18-2-312]

*Condition III.C.1 of Attachment "B" of Operating Permit No. 28162 shall be amended to read as follows:*

#### **III. GAS TURBINE ENGINES**

##### **C. Nitrogen Oxides**

1. Emissions Limitations/Standards
  - a. The Permittee shall not cause to be discharged into the atmosphere from the stack of the stationary GE gas turbine engine, any gases which contain nitrogen oxides in excess of that calculated from the following equation:

$$\text{STD} = 0.0150 \cdot (14.4) / Y + F$$

where:

STD = allowable NO<sub>x</sub> emissions (percent by volume at 15 percent oxygen and

on a dry basis)

Y = manufacturer's rated heat rate at manufacturer's rated peak load (kilojoules per watt hour), or actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour.

F = NO<sub>x</sub> emission allowance for fuel-bound nitrogen as defined in 40 CFR §60.332(a)(3)

[40 CFR §60.332(a)(2)]

*The following conditions shall be added to Operating Permit No. 28162 as Section VII of Attachment "B"*

## **VII. MAXIMUM ACHIEVABLE CONTROL TECHNOLOGIES**

**A.** The Permittee shall operate the Ingersoll-Rand reciprocating internal combustion engine (RICE) generator set as an emergency generator effective June 1, 2007.

1. The Ingersoll-Rand engine may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by the manufacturer, the vendor, or the insurance company associated with the engine.
2. The Ingersoll-Rand engine may be operated an additional 50 hours per year in non-emergency situations.

[40 CFR §63.6675]

**B.** A stationary RICE which is an existing emergency stationary RICE does not have to meet the requirements of 40 CFR §63 Subpart ZZZZ.

[40 CFR §63.6590(b)(3)]

**C.** Permit Shield

Compliance with the conditions of this Part shall be deemed compliance with the following applicable requirement as of the issuance date of this permit: 40 CFR §63.6590(b)(3).

*Row 8 of the Equipment List in Attachment "C" of Operating Permit No. 28162 shall be amended as follows:*

<b>Equipment Type</b>	<b>Max Capacity</b>	<b>Make</b>	<b>Model</b>	<b>Serial Number</b>	<b>Installation/Mfg Date</b>	<b>NSPS Applicable</b>
Emergency Generator	530 hp	Ingersoll-Rand	PSVG-10	10BPS1666	1953	No